

### **REMARKS**

Pursuant to 37 C.F.R. § 1.111, Applicant respectfully requests reconsideration of the claim rejections and objections set forth in the Office Action dated July 28, 2006.

#### **Claim Objections**

Claim 8 was objected to because of minor informalities. The Applicant has amended Claim 8 to correct the recited typographical errors. Accordingly, Claim 8 is in condition for allowance. In addition, Claim 7 was amended to correct typographical errors and thus is in condition for allowance.

#### **Allowable Subject Matter**

Claims 5 – 6 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 5 – 6 depend from an allowable base claim, so are allowable for at least this reason.

#### **Claims Rejections**

##### **35 U.S.C. § 112, second paragraph**

Claim 7 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention. Claim 7 was amended to distinctly claim the subject matter which applicant regards as the invention.

##### **35 U.S.C. § 103(a)**

Claims 1 – 4 and 7 – 8 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Kivekas et al. (U.S. Publication No. 2003/0003891) in view of Hostetter (U.S. Patent No. 4,866,395).

Claim 1 recites, *inter alia*, changing relative levels of the radio frequency signal input to the first mixer and the radio frequency signal input to the second mixer. In other words, the level of the radio frequency signal input to the first mixer and the level of the radio frequency signal input to the second mixer are relatively changed by the level correcting voltage.

Kivekas et al. fail to disclose or suggest changing relative levels of the radio frequency signal input to the first mixer and the radio frequency signal input to the second mixer. In fact, Kivekas et al. disclose a contrary arrangement. Kivekas et al. teach that "the received signals are amplified by the transconductance mixers 40, 50 in a way that leads to an essentially equal gain on both of the quadrature channels 4, 5 between the input to the respective channel 4, 5 and the input to the respective analog-to-digital converter 43, 53." (Paragraph 53). In other words, the controlling means 9 inputs a single (equal) signal into the transconductance mixers 40, 50 that adjust the gain value of a plurality of signals, so that the gain on both of the quadrature channels 4, 5 is equal. The arrangement taught by Kivekas et al. is in direct contrast to the arrangement of Claim 1 where the radio frequency signals that are input into the mixer are relatively changed before entering the mixer. Accordingly, Claim 1 is allowable over the arrangement taught by Kivekas et al.

Hostetter fails to disclose changing relative levels of the radio frequency signal input to the first mixer and the radio frequency signal input to the second mixer. In fact, Hostetter et al. disclose an arrangement that is contrary to the arrangement of Claim 1. Hostetter et al. teach a "power splitter 18 divides the IF signal into two equal strength signals." (Column 5, Lines 51 – 55). In other words, the level control 16 produces one signal that is split into two equal signals by the power splitter 18 (Figure 2). The arrangement disclosed by Hostetter does not provide an arrangement where the relative levels of the two signals can be relatively changed to enhance the accuracy of the bit signal and reduce the bit error. Accordingly, Claim 1 is allowable over the arrangement taught by Hostetter.

Dependent Claims 2 – 4 depend from an allowable base claim, so are allowable for at least this reason.

Independent Claims 7 and 8 recite a feature that is similar to the distinguishable feature of Claim 1, so are allowable for at least the reasons stated above.


Application No. 10/801,370

Response to Office Action dated July 28, 2006

**Conclusion**

For at least the reasons presented above, the Applicant respectfully submits that the pending claims are in condition for allowance and requests that the Examiner issue a Notice of Allowance. The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,



Gustavo Siller, Jr.  
Registration No. 32,305  
Attorney for Applicant

BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, ILLINOIS 60610  
(312) 321-4200